# Glossary

Note: italicized terms within a glossary entry have their own entries in the glossary.

arbitrage: According to Investopedia.com it is "The simultaneous purchase and sale of an asset in order to profit from a difference in the price. It is a trade that profits by exploiting price differences of identical or similar financial instruments, on different markets or in different forms. Arbitrage exists as a result of market inefficiencies; it provides a mechanism to ensure prices do not deviate substantially from fair value for long periods of time." So-called regulatory arbitrage means moving an investment from a form that is heavily regulated to one that is less regulated in order to profit from the weaker regulations.

collateralized debt obligation: A collateralized debt obligation, or CDO, is an artificial security created by financial engineers. It bundles together a pool of similar loans into securities that can be bought or sold. An investor that buys into a CDO owns a right to a part of this pool's interest income and principal. For example, a bank might pool together 5,000 different mortgages, car loans, and credit card debts into a CDO. An investor who purchases a tranche of the CDO would be paid a portion of the interest owed by the 5,000 borrowers in the pool. The investors in the CDO run the risk that some borrowers won't pay back their loans. But the risk is supposedly dispersed by bundling together so many loans. The interest rate paid to investors varies by the odds that the borrowers whose loans make up the CDO will default on their payments.<sup>2</sup> The more of that risk an investor is willing to take on, the higher the interest income for their tranche.

• **CDO squared:** For more serious gamblers only. You take riskiest *equity tranches* from a bunch of different

pools of debt. You put them into their own new pool. You chop up that pool into *tranches* and sell the pieces just like you would a CDO. The highest slices of a CDO squared would be first in line to get the interest payments, but last in line for defaults. The equity tranche of a CDO squared would be last in line for the income and first in line to suffer losses from defaults. But the entire CDO squared faces much more risk than a normal CDO.

•CDO cubed: For wild-eyed gamblers who won't leave the roulette table until a fire burns down the casino. You take riskiest *tranches* from a bunch of CDO-squared pools and put them into a new pool and tranche that one up. It's hard to believe anyone would make, sell, or buy such a thing. Let me know if you find one.

credit default swap (CDS): A derivative security that shifts risk from a party that doesn't want the risk to a party that is willing to accept it . . . for a price. Basically it is like an insurance policy. You can insure a bond that you own with someone else (called the "counterparty") by paying that person a certain amount of money, just like paying insurance premiums. If the bond goes into default, that other person has to make you whole so that you don't lose anything on the defaulted bond. They don't call this insurance because insurance is regulated but CDSs are not.

But it is also very different from insurance as we know it. You and your counterparty can enter into a credit-default-swap agreement even if neither of you own the bond or item you're insuring. It is very much like taking out an insurance policy on a house that you don't own. People draw up these agreements on corporate bonds they don't own. They even do this to make bets on the weather. You can do a CDS to bet on absolutely anything as long as you can find a counterparty. These securities

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are unregulated. There may be from \$60 trillion to \$600 trillion worth of them around the world.

credit rating agencies: There are three primary ratings agencies in the United States: Moody's, Standard and Poor's, and Fitch's. They basically assign ratings that measure the credit worthiness of stocks, bonds, and other forms of debt. They also rate the credit worthiness of many institutions, including financial institutions. The higher the rating, the less a corporation, government agency, or country will have to pay in interest to raise money through the issuing of debt. In the United States, these ratings are given special status by government agencies. Their ratings, in effect, determine what financial instruments are appropriate for investment by pension funds and other public funds.

**debt pool**: To have a better opportunity to spread out risk, debt instruments like mortgages, credit cards, auto loans, and the like are put into large groupings called pools. The owners of such pools hope to control their potential losses due to default by owning a large pool of such debt.

derivative: A type of financial instrument whose value is derived from something else, called the underlying or referenced stock, bond, or other financial instrument. For example, a stock index is a derivative based on a group of underlying stocks. When you buy an index, you are not buying the stocks that make up that index. Yet your index security goes up and down based on the value of the stocks it tracks. This is different from owning a share of a mutual fund. In such a fund you actually own a piece of a pool of real stocks and bonds.

Think of fantasy baseball. It's a derivative game of betting based on statistics based on the behavior of real major league players. You don't own the real players, or even a piece of them as in a mutual fund. When you own a fantasy baseball team,

you don't really own anything except your derivative statistics compiled for you by a service. Yet your bet has value because other players and their derivative teams are willing to bet with you. There can be tens of thousands of fantasy baseball leagues based on only the two major leagues. Similarly, there are tens of thousands of derivative securities based on combinations of the same underlying real securities. Most of the financial instruments described in this book, the *collateralized debt obligation*, synthetic CDO, credit default swap, CDO squared, and so on, are derivatives.

equity: In real estate it means the difference between what your house and property is worth and how much you owe on it. (If it is worth more than you owe, then you have equity. If it is worth less than you owe, you have "negative equity.") It also refers to the ownership interest in a corporation, usually in terms of stock or preferred shares, and it can more generally refer to stock market investments. In a brokerage account, equity is what your shares are worth if you sold them right now (minus any money you borrowed to buy them).

financial securities: Financial instruments representing financial value that you can buy and sell. Securities are broadly categorized into debt securities, such as federal notes, bonds, and securities like common stocks that represent a share of ownership in a company.<sup>3</sup> Financial engineers spend their time dreaming up new securities, some of which have turned out to be disastrous for our economy.

hedge fund: Investopedia.com describes a hedge fund as more or less "a mutual fund for rich people." They use sophisticated methods and lots of *leverage* to accumulate income. You've got to be a sophisticated investor and be worth over a million dollars to invest in such a fund. The *Washington Post* reports that "As many as 2,000 of 10,000 hedge funds closed last

year [2008] as clients redeemed their investments, according to various industry estimates. And the total amount of assets invested in hedge funds worldwide was cut nearly in half to \$1.9 trillion." For the most part they are unregulated, but the Obama administration is changing that.

investment banks: This is a complex financial institution that helps government agencies, countries, and corporations raise capital. It helps them issue stocks and bonds. It also helps to arrange and facilitate corporate mergers and acquisitions of other corporations. They also invent, buy, and sell new financial instruments like collateralized debt obligations and credit default swaps.

leverage: The use of financial instruments to borrow money so that you can increase the size of your investments. The more leverage, the more risk you are taking on. For example, a mortgage allows you to leverage your down payment. If you put down 20 percent on a \$100,000 house and borrow 80 percent, you are leveraged 4 to 1. If the value of your house goes up \$20,000, your investment has increased by 100 percent. But if it declines by \$20,000, your equity has been wiped out. Some *hedge funds* and banks were leveraged 30 to 100 times their equity. When those investments soured, they lost billions because of the high ratio of leveraging.

moral hazard: in the context of the financial crisis, a term used to signify the perils of bailing out institutions that are too big to fail. If large institutions know they will be bailed out, economists argue, they will take greater risks than they would if they were subject to the market discipline of prospective failure.

prime, subprime, and Alt-A loans: Roughly speaking there are three types of borrowers—those with good credit histories (prime), those with poor credit histories (subprime), and those

who may have good credit but don't want to document their income on loan applications (Alt-A). Usually a FICO credit score of 640 is the dividing line. (FICO is the widely used credit rating produced by Fair Isaac and Company that supposedly measures how likely you are to pay your bills. The higher the number the more credit worthy you are.)

**productivity:** It is a measure of the output of our economy divided by the hours worked in our economy. Output is usually measured by the Gross Domestic Product, the standard measure of the value of all the goods and services we produce in the country.

**quants:** Short for "quantitative analysts." In this book the term refers to those who do the mathematical and statistical work to determine risk and profitability of financial instruments like *derivatives*.

short selling: Selling a stock you don't own today and promising to deliver it on a specific date in the future, say thirty days from now. You are gambling that the stock price will drop between now and thirty days from now so that you can buy it more cheaply. In theory, the share you buy goes to the person you made the short sale to. The difference between your short sale today and what you end up buying the share for within the next thirty days is your profit or loss. Obviously, short sales are highly profitable when you think the market is going down, and then it does.

synthetic collateralized debt obligation: This financial security is a combination of a collateralized debt obligation and a credit default swap. It creates an artificial CDO (tranches and all) without assembling or owning the underlying debt pool. Instead credit default swaps are used. A counterparty provides insurance payments to the synthetic CDO to protect various kind of debt. The investor buys tranches of the synthetic CDO. The

investor's money goes into a fund that insures the counterparty's debt. If that debt defaults, the investors in the riskiest tranche of the synthetic CDO are the first to lose their money, and so on up the tranches. The great advantage of the synthetic CDO is that it can be created quickly without the muss, fuss, and expense of buying up a pool of debt.

systemic risk: Financial risk can be divided into several kinds. Bankers take risks when they make specific loans. Investors take risks when they invest in the bank. But systemic risk is when a series of individual loan and investment risks string together to harm the financial system and the economy as a whole. The collapse, or near collapse, of several major financial institutions in 2008 froze the credit system as a whole and produced a deep economic recession. Those practices and financial instruments that caused the meltdown posed systemic risk.

tranche: The French word for "slice." It usually refers to the different slices of a *collateralized debt obligation* that is based on a *debt pool*. (But these days pundits and politicians use it as much as they can to show they're financially knowledgeable.) Usually there are three main slices: equity, mezzanine, and senior.

- senior tranche: The group of securities (it could be one large security or many smaller ones) that is first in line to receive the interest payments from the entire pool of debt. Therefore securities that come from the senior tranche are mostly protected from default. But as a result of lower risk exposure, they receive a lower interest rate.
- mezzanine tranche: The group of securities that is next in line to be paid from the entire pool's interest collections on the debt. It is therefore more risky than a security from the senior tranche. As a result, it gets a higher rate of return.

• equity tranche: This is the gambler's slice—the bottom slice of the pool. Securities from this group are last in line to receive interest payments from the pool of debt, and first in line to take the losses from defaults. Securities from the equity tranche, therefore receive a very high rate of return, assuming the defaults don't wipe it out entirely. (It's called the equity slice because equity holders are the last to have a claim on assets in case of a corporate default.)